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Claim 1 is amended to more clearly define the subject matter of the present invention. Support for the amendment to claim 1 is found in Fig. 1(b) of the originally filed disclosure. No new matter is added.

The present invention is a shaft for light weight golf clubs having alternating layers of straight and angled fibers which is 35-50 percent lighter than conventional shafts while providing the same outer diameter and the same characteristics as conventional shafts such as flexural rigidity, flexural strength, torsional rigidity, torsional strength and crushing strength.

Claim rejections - 35 U.S.C. §103

Claims 1-2, 5-6, 9-10, 13-14 and 18 stand rejected under 35 U.S.C. § 103 as being unpatentable over Jackson in view of Turner, Kobayashi '504 and Eberle.

In order to establish a case of *prima facie* obviousness, three criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally the prior art reference(s) must teach or suggest all the claim limitations. MPEP §2142.

Applicants respectfully submit that the combination of references as proposed by the Examiner, taken for all that the references disclose and fairly suggest, does not teach or suggest all of the claim limitations of the present invention. More specifically, it is Applicants' position that the cited references neither teach nor fairly suggest a four-layer structure in which the layers are arranged in concentric circles.

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Applicants thank the Examiner for pointing out this novelty of the claims over the primary reference. Specifically, at page 6 of the current office action, the Examiner states that "[t]he argument that Jackson does not disclose four distinct layers [sic] without repeating the pattern is agreed with... The argument that Jackson does not disclose a shaft made from four distinct layers which neither from [sic] a single flat laminate structure nor coil and overlap one another is agreed with." By claiming that the four layers must be arranged substantially concentrically, the elements which the Examiner has indicated to be novel over the Jackson reference are thereby incorporated in claim 1. See Fig. 1(b) of the instant application.

It is the Applicants' position that the golf club shaft structure of Fig. 1(b) is neither anticipated nor rendered obvious by the cited prior art. Clearly, by comparing Fig. 3 of Jackson to Fig. 1(b) of the instant application, the unobvious differences between the instant claims, as amended, and what is fairly taught by Jackson are easily appreciated.

The only way that Jackson may come close to the instant invention would be to wind the laminate around the mandrel one complete time. This, however, is not suggested in any way by the reference. First, logically, if this were the case, a seam, running the length of the shaft, would be formed. One of ordinary skill in the art could imagine that such a seam, communicating the exterior to the mandrel, would have a negative impact on the performance of the shaft. Even more persuasive is the fact that Jackson teaches away from a shaft having only one laminate wrap. In the paragraph bridging columns 1 and 2, Jackson notes that the laminate is approximately 10-15 mils thick. This laminate is then rolled on a shaft to produce an overall wall thickness of approximately 30 mils. Clearly, this involves more than one laminate wrap around the mandrel.

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Therefore, Applicants respectfully submit that the cited references, taken for all then fairly teach one of ordinary skill in the art, neither teach nor fairly suggest the golf club shaft as instantly claimed in amended claim 1. Consequently, the present invention as claimed in independent claim 1 is nonobvious in light of the cited references.

Applicants respectfully submit that if an independent claim is nonobvious under 35 U.S.C. § 103, then any claim depending therefrom is nonobvious. MPEP § 2143.03. Dependent claims 2, 6, 6, 9, 10, 13, 14 and 18 being dependent upon and further limiting independent claim 1, should also be allowable for that reason, as well as for the additional recitations each contain.

For the reasons stated above, Applicants respectfully request reconsideration and withdrawal of the rejection of claims 1, 2, 5, 6, 9, 10, 13, 14 and 18 as being unpatentable under 35 U.S.C. § 103(a).

Claims 3-4, 11-12 and 15-16 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Jackson in view of Turner, Kobayashi '504 and Eberle as applied to claims 1-2, 5-6, 9-10, 13-14 and 18 above, further in view of Hedrick and Cheng.

Applicants respectfully submit that the Hedrick and Cheng references both fail to overcome the deficiencies of the primary reference, with respect to claim 1, as noted above. Therefore, if an independent claim is nonobvious under 35 U.S.C. § 103, then any claim depending therefrom is nonobvious. MPEP § 2143.03. Dependent claims 3, 4, 7, 8, 11, 12, 15 and 16 being dependent upon and further limiting independent claim 1, should also be allowable for that reason, as well as for the additional recitations each contain.

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Claim 17 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Jackson in view of Turner, Kobayashi and Eberle as applied to claims 1-2, 5-6, 9-10, 13-14 and 18 above, and further in view of Cecka.

Applicants respectfully submit that the Cecka reference fails to overcome the deficiencies of the primary reference, with respect to claim 1, as noted above. Therefore, if an independent claim is nonobvious under 35 U.S.C. § 103, then any claim depending therefrom is nonobvious. MPEP § 2143.03. Dependent claim 17 being dependent upon and further limiting independent claim 1, should also be allowable for that reason, as well as for the additional recitations it contains.

For the totality of the reasons described above, Applicants respectfully submit that the claims, as amended, place the application in condition for allowance. Reconsideration and withdrawal of the outstanding rejections under 35 USC 103(a) is respectfully requested.

Conclusion

In view of the foregoing, the application is now believed to be in proper form for allowance. Early notice to that end is earnestly solicited.

The Commissioner is hereby authorized to charge payment of any additional fees associated with this communication, or credit any overpayment, to Deposit Account No. 13-4550.

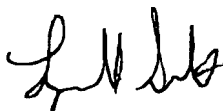
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If the Examiner believes that a telephone conference would be of value,
he is requested to call the undersigned counsel at the number listed below.

Respectfully Submitted,



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